Forest Health Protection
Pacific Southwest Region

Date: June 27, 2016
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To: Ted McArthur, District Ranger, Salmon River Ranger District

Subject: Biological evaluation following Godfrey Ranch site visit

At the request of Roger Siemers and Dave Burgess, Klamath Silviculture, a site visit was made to the Blue Ridge portion of the Godfrey Ranch project area May 24, 2016. The Godfrey Ranch was last visited June 4, 2012. The current proposal to treat approximately 408 acres of approximately 20-40 year old plantations is on the FY2017-18 Forest Capability Report. The objectives were to assess the current stand conditions for insect and disease activity and discuss suitability for WBBI funding. Roger Siemers, Dave Burgess, Katelin Williamson (Klamath NF), Pete Angwin and Cynthia Snyder (FHP) were present.

Background

The original Godfrey Ranch project was first submitted in FY2006. It consisted of thinning within the Forks of the Salmon Wildland Urban Interface (WUI). The project has not fared well in selection due to the age and size distribution of the plantations. It has been over a decade since the original proposal and as trees have grown, changes have been made of the years. The funding proposal for FY2009 was for pre-commercial thinning on 340 acres, the project submitted in FY2012 consisted of 408 acres of pre-commercial thinning in overstocked pine plantation stands. The project was partially funded in FY2016 as part of the Two Chiefs Project and 100 acres were thinned. In FY2017 there is a proposal to continue Godfrey Plantations as part of the Two Chiefs project.

NEPA for the project is complete under the "Salmon Plantation Treatment" Decision Memo (signed January 26, 2004) and the "Salmon Pre-commercial Thin and Release" Decision Memo (signed August 20, 2002). The project is located in the Forks of Salmon WUI, with parts in the Salmon LSR, most is on land that is designated as matrix in the Klamath NF LRMP.

Many of the Godfrey Ranch plantations were planted in 1988 following the 1987 Glasgow Fire, others originated following the 1977 Hog Fire and the 1987 Yellow Fire. All were replanted within a few years of each fire. As a result, the trees in the plantations are now 30 to 40-years old, depending on which fire affected each.

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The Godfrey Plantations proposed for FY2017 are called the Blue Ridge Unit (Figure 1) and are located within both WUI and LSR land designations in the Indian Creek Watershed approximately 6.5 miles east of Forks of the
Salmon

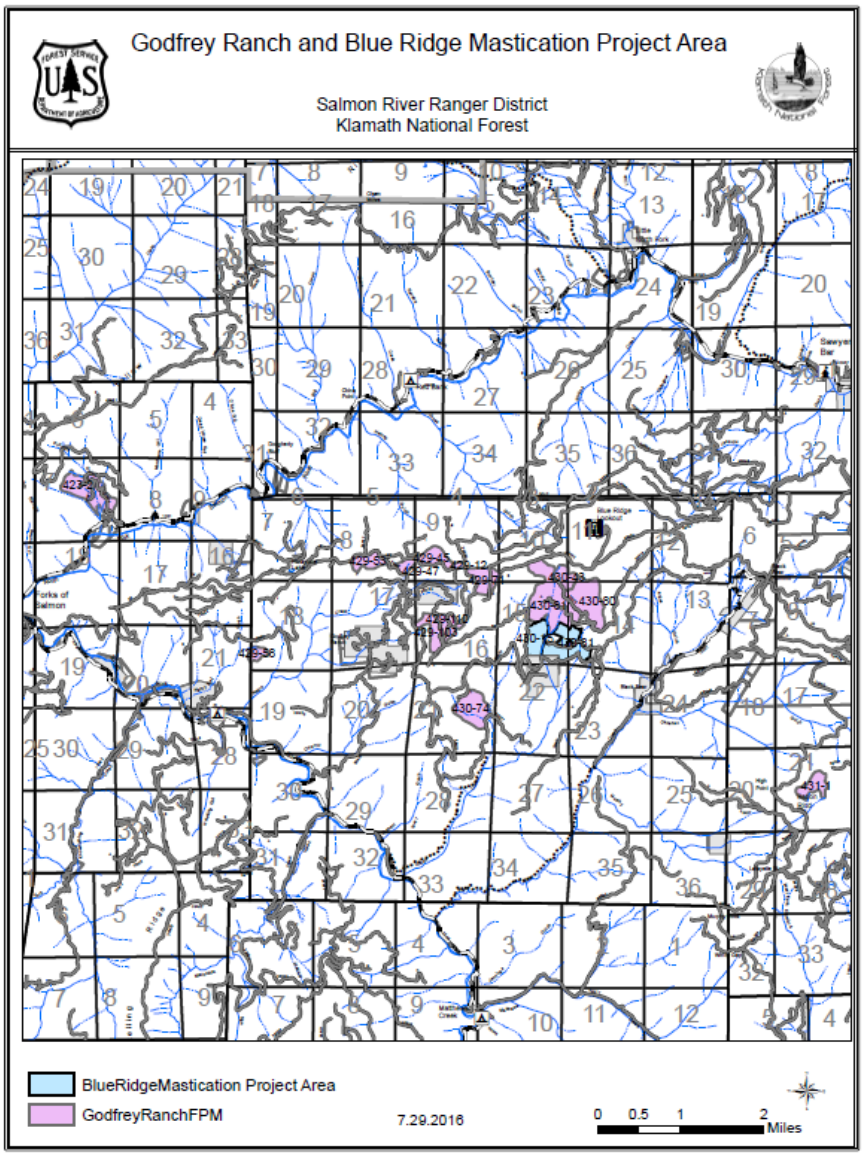

Figure 1. Map of Godfrey Ranch Project area.

(T39N R4W sect. 15 and 16).

Observations

The Blue Ridge Unit is located within both WUI and LSR land designations in the Indian Creek Watershed. Stocking consists mostly of ponderosa pine and Douglas-fir, with small amounts of incense cedar and sugar pine. There is also a small component of hardwoods including black oak and madrone. Most have a high proportion of ponderosa pine to Douglas-fir. All are overstocked, with stocking densities varying from 200-400

trees per acre with the majority of the trees occupying the codominant crown class, creating a closed canopy. Current Stand Density Index (SDI) is 100-450 with diameters ranging 4-14 inches (Figure 2). Aerial survey data shows large acreages of western pine beetle-caused mortality in ponderosa pine near the Blue Ridge and Godfrey Ranch

Figure 2. Godfrey Ranch plantation unit in WUI, not in LSR.

properties.

Elytroderma was noted in some of the pine. Dwarf mistletoe was noted in some of the Douglas-fir. Although these may cause additional stress to individuals affected, they are not of significant consequence to the stands as a whole. Selection against diseased trees can be made at the time of thinning.

Stands are currently at an elevated risk of attack by western pine beetle, and are also at an elevated risk for wildfire and drought-related mortality. Target stocking levels in stands is desired to be 76 -134 stems per acre, SDI of 60-160 not including hardwoods, which would keep the SDI below 230 for 20+ years for units outside of the LSR and 125-150 trees per acre within the LSR favoring Douglas-fir and hardwoods. Reduction of stocking densities below 230 will lessen the risk of Dendroctonus bark beetle attacks and decrease fuels to address WUI directives. Benefits include fuels reduction, watershed enhancement, promotion of stand health, increased fire safety for community, and accelerated stands to reach old growth characteristics and help develop additional northern spotted owl forage habitat.

The Salmon River Ranger District plans to employ a combination of pre-commercial chainsaw thinning and mastication in the units, leaving the "best of the best" of a variety of tree species. In units that are chainsaw thinned, fuels will be treated by hand piling and burning.

Figure 3. Godfrey Ranch plantation unit in WUI and LSR.

Discussion

The Blue Ridge unit of the Godfrey Ranch area has been impacted by wildfire in the past losing many homes in the mid-1980s. This area is within the Two Chiefs perimeter and concern for the WUI is high for the District. The area is at risk of western pine beetle-caused mortality in ponderosa pine due primarily to overstocking and drought. As with most bark beetles, the most economical and efficient means of management is to maintain trees and stands in a healthy condition. Stocking reduction and creation of diverse stand conditions reduce overall susceptibility to western pine beetle. Thinning was discussed and it was suggested that treatment should bring the SDI down to a level where it would remain below 200 for a minimum of 20 years to meet the Region requirement of no less than 20 year re-entry for thinning. Thinning would also reduce the risk of losing homes due to wildfire as conditions continue to be hot and dry throughout California.

If you have any questions regarding this report and/or need additional information, please contact Cynthia Snyder at 530-226-2437 or Pete Angwin at 530-226-2436.

/s/ Cynthia Snyder

CC: Roger Siemers, Dave Burgess, Katelin Williamson, Chris Losi, Sheri Smith, Phil Cannon, Chris Fischer, and Sherry Hazlehurst